In chapter VIII ('La géométrie physique,' § 30, 'La forme géométrique de notre univers') our author stresses the idea, that even if our universe were exactly Euclidean, it would be forever impossible for us to demonstrate this. As I said in my 'Non-Euclidean Geometry for Teachers,' p. 14: "If in the mechanics of the world independent of man we were absolutely certain that all therein is Euclidean and only Euclidean, then Darwinism would be disproved by the reductio ad absurdum. All our measurements are finite and approximate only. The mechanics of actual bodies in what Cayley called the external space of our experience, might conceivably be shown by merely approximate measurements to be non-Euclidean, just as a body might be shown to weigh more than two grams or less than two grams, though it never could be shown to weigh precisely, absolutely two grams."

Our author suggests the following experiment for proving our space non-Euclidean: From a point trace six rays sixty degrees apart. On them successively mark off the sects OA_0, OA , OA_2, ..., OA_n, of which each is the projection of the following. If we finish by finding between OA_n and 2^nOA_0 a difference of constant sense and greater than imputable to error of procedure, our universe is non-Euclidean.

In conclusion this beautiful little book has the advantage of being the production of an active and fertile original worker in the domain of which it treats. His 'Géométrie general des espaces' (1898), his 'Sur le paramétre de l' univers, and 'Sur la géométrie des êtres plans' (1901), 'Le cinquiéme livre de la métagéométrie,' (1901), 'Les cosegments et les volumes en géométrie non euclidienne' (1902), and his 'Poligones réguliers spheriques et non-euclidienns,' shortly to appear in that virile young monthly, *Le Matematiche*, and which I had the advantage of reading in manuscript, show that Bordeaux is honored by a worthy successor of Hoüel, so universally beloved.

DEPARTMENTS.

SOLUTIONS OF PROBLEMS.

ARITHMETIC.

Remark on Problem No. 154, by G. B. M. Zerr.

According to the correction made in the April number, the result in the second solution is 17. This result is not correct. The problem as stated is not possible. It takes 12 oxen to eat the growing grass. Then $17-12=5$ oxen remaining to eat the grass already grown.

Now 9 oxen eat the standing grass in 6 weeks or 1 ox eats it in 54 weeks.

$\therefore$ 5 oxen will eat it in $54\div5=10\frac{4}{5}$ weeks.

$\therefore$ 17 oxen will eat it, the grass, together with what grows, in $10\frac{4}{5}$ weeks.